

CATALOG #: _____

TYPE: _____

PROJECT: _____



FEATURES

- Provides auxiliary illumination from the perimeter of the operating room
- Reduces intense contrast between surgical and preparatory work areas
- Multiple distribution options provide effective, application specific lighting performance
- Smooth surface doorframe and lens materials simplify cleaning
- Optional green circuit provides enhanced visual clarity for operating room staff and reduces eye fatigue during videoscopic surgical procedures
- Designed exclusively for hospitals and medical facilities utilizing 15/16", 1-1/2", and 2" face T-bars
- Anti-microbial finish suppresses the spread of dangerous micro-organisms, mold, and bacterial growth
- Supplies uniform ambient illumination for the remainder of the surgery room
- Optional triple gasket protects against contaminant ingress
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – 20-gauge die-formed C.R.S.
- DOOR FRAME** – .050" extruded aluminum, flat with mitered corners. Fully enclosed spring-loaded cam latches and T-type hinges. Door frame and lens are grounded to the fixture housing.
- SHIELDING** – One-piece frosted acrylic, pattern #12, .125" thick.
- FINISH** – 92% minimum average reflective white anti-microbial powder coating bonded to phosphate-free, multi-stage pretreated metal. Salt spray tested, 1,000 hours (ASTM B117). All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High-quality mid-power LED boards. Rated for 50,000 hours at 70% lumen maintenance (L70). 50/60 Hz constant current driver.
- MOUNTING** – NEMA Type "G" 15/16" or 1-1/2" grid standard. (4) Earthquake clips provided. Drywall flange type available.
- LISTINGS** –
 - cCSAus certified as luminaire suitable for dry or damp locations.
 - City of Chicago Environmental Air approved when specified with CP option.
 - Available with BIOS® consult factory
 - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: MDSG - 24 - L32/GRN/L147/840 - SYM - OPTIONS - DRV - UNV

ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS ^[1]	CRI	CCT	
MDS	G 15/16" or 1-1/2" grid	1 1' ^[3]	2 2' ^[4]	1x4	8 80	30 3000K	
		F Flange ^[2]	2 2'	4 4'	L70	9 90	35 3500K
					2x2	40 4000K	50 5000K
					L54	5,400lm white only	
					L100	10,000lm white only	
					L14/GRN/L36	1,400lm green/3,600lm white	
					L14/GRN/L67	1,400lm green/6,700lm white	
					2x4		
					L116	11,600lm white only	
					L220	22,000lm white only	
					L32/GRN/L77	3,200lm green/7,700lm white	
					L32/GRN/L147	3,200lm green/14,700lm white	

SHIELDING

- SYM Symmetric
- SYM/ASY Symmetric/asymmetric ^[5]

OPTIONS

- EM/10W 10-watt emergency battery
- GLR Fuse, fast blow (specify voltage), one per driver
- (L__) Additional lower lumen packages available.
Example: 13,500 nominal lumens = MDSG-24-L220/840-(L135) ^[6]
- CP Chicago plenum (CCEA)
- TG Triple gasket ^[7]
- 2C Two circuit wiring ^[8]

CONTROL ^[9]

- DRV Non-dimming driver
- DIM Dimming driver, 0-10V
- UNV 120-277V

VOLTAGE

- 120 120V
- 277 277V
- 120-277V

NOTES

- Lumen output based on 80 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
- See page 3 for CROSS SECTIONS.
- 4' length only.
- 2' width only.
- Reduces fixture output up to 5%.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Field-installed. See page 3 for GASKETING DETAILS.
- Inboard-outboard wiring. Allows for independent dimming of each circuit when ordered with DIM driver. Fixture is wired as two circuit by default when specified with green circuit.
- See page 4 for ADDITIONAL CONTROL OPTIONS.



FIXTURE PERFORMANCE DATA

LED PACKAGE	WATTAGE		SYMMETRIC				SYMMETRIC/ASYMMETRIC				
			DELIVERED LUMENS		EFFICACY (lm/W)		DELIVERED LUMENS		EFFICACY (lm/W)		
	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	
WHITE											
1x4	L70	62	-	7105	-	115	-	6598	-	106	-
	L100	86	-	10304	-	120	-	9745	-	113	-
2x2	L54	42	-	5439	-	130	-	5318	-	127	-
	L100	79	-	10089	-	128	-	9864	-	125	-
2x4	L116	94	-	11626	-	124	-	11368	-	121	-
	L220	171	-	22120	-	129	-	21680	-	127	-
GREEN/WHITE											
2x2	L14/L36	28	31	3622	1334	129	43	3542	1173	127	38
	L14/L67	53	31	6720	1334	127	43	6569	1173	124	38
2x4	L32/L77	63	62	7743	3156	123	51	7571	2799	120	45
	L32/L147	114	62	14731	3156	129	51	14439	2799	127	45

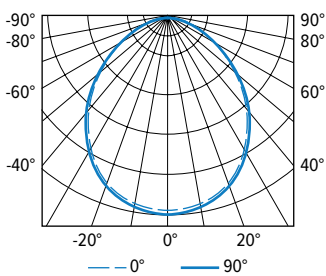
MULTIPLIER TABLE

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	3000K	0.96
	3500K	0.97
	4000K	1.00
	5000K	1.03
90 CRI	3000K	0.79
	3500K	0.80
	4000K	0.83
	5000K	0.86

- Photometrics tested in accordance with IESNA LM-79. Results based on 80 CRI/4000K CCT, average wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier table to calculate additional options.

PHOTOMETRY

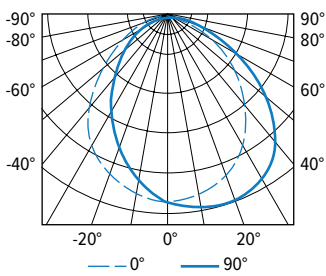
MDSG-24-L220/840-SYM Total Luminaire Output: 22120 lumens; 171 Watts | Efficacy: 129 lm/W | 80 CRI; 4000K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	9327	9327	9327	9327	9327	
	5	9357	9244	9233	9244	9357	880
	15	8890	8796	8796	8796	8890	2485
	25	7980	7890	7888	7890	7980	3640
	35	6694	6588	6574	6588	6694	4126
	45	5101	4990	4942	4990	5101	3857
	55	3480	3368	3318	3368	3480	3033
	65	2122	2036	2052	2036	2122	2059
	75	1140	1123	1214	1123	1140	1223
	85	400	414	484	414	400	460
	90	11	47	62	47	11	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	90 - 120	7005	32
	90 - 130	11131	51
	90 - 150	18021	83
	90 - 180	21764	100
	0 - 180	21764	100

MDSG-24-L220/840-SYM/ASY Total Luminaire Output: 21680 lumens; 171 Watts | Efficacy: 127 lm/W | 80 CRI; 4000K CCT



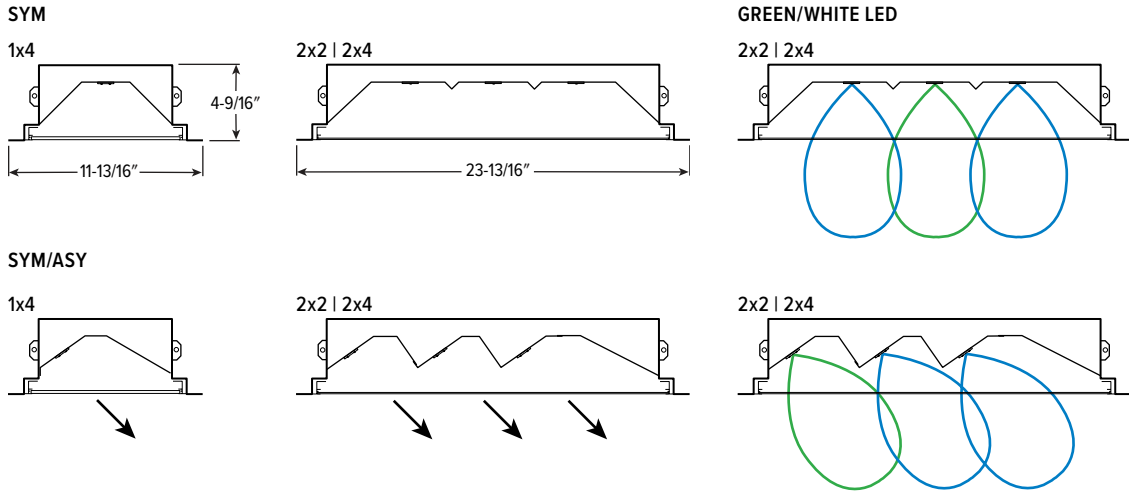
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	8686	8686	8686	8686	8686	
	5	8977	8861	8701	8370	8288	820
	15	9264	8947	8300	7517	7237	2325
	25	9047	8550	7515	6334	5892	3436
	35	8309	7679	6377	4961	4432	3961
	45	6860	6217	4939	3606	3144	3803
	55	4849	4400	3438	2438	2135	3077
	65	2908	2660	2124	1535	1392	2107
	75	1508	1341	1117	881	844	1201
	85	481	405	367	325	343	412
	90	34	21	12	49	64	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	6582	31
	0 - 40	10543	50
	0 - 60	17423	82
	0 - 90	21143	100
	0 - 180	21143	100

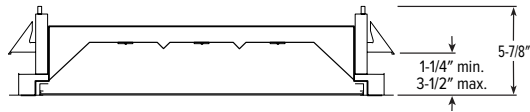


MDS LED LED Medical/Surgical Troffer – Wide Grid

CROSS SECTIONS



F CEILING TYPE INSTALLATION



	ROUGH-IN	FINISH TRIM SIZE
1x4	12-3/8" x 48-3/8"	13-5/16" x 49-5/16"
2x2	24-3/8" x 24-3/8"	25-5/16" x 25-5/16"
2x4	24-3/8" x 48-3/8"	25-5/16" x 49-5/16"

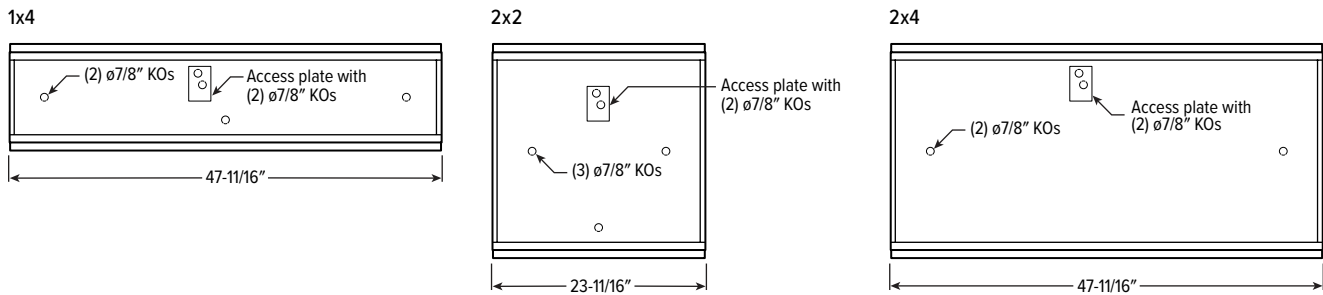
For continuous row mounting, add finish trim size for each additional fixture.

MDSF fixtures can be field converted to work with 1-1/2" or 2" NEMA Type "G" ceiling systems.

FIXTURE DETAILS

See hew.com/power-entry for power entry details.

BACK VIEWS



WHITE ONLY



GREEN/WHITE

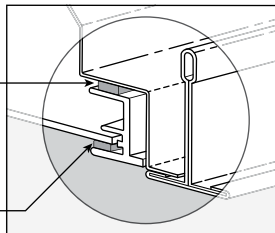


GASKETING DETAILS

DOUBLE GASKETING (STANDARD)

First gasketing factory-installed between door frame and luminaire housing prevents light leak and reduces dust ingress.

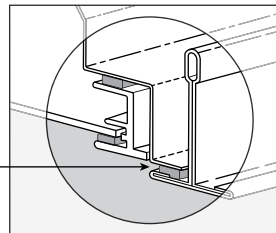
Second gasketing factory-installed between door frame and lens reduces dust and bug contaminants.



TRIPLE GASKETING (TG OPTION)

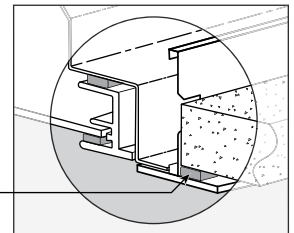
T-bar

Third gasketing field installed between bottom perimeter of fixture and T-bar ceiling seals plenum dust from the room.

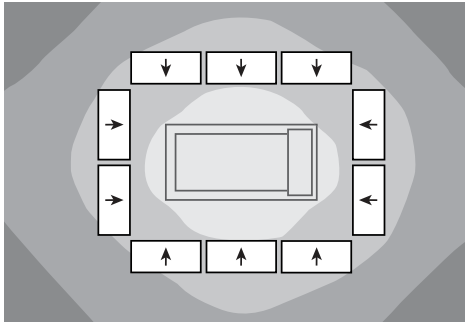


Drywall

Between bottom perimeter of fixture and hardpan ceiling.



TYPICAL SURGICAL SUITE LAYOUT



ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming driver